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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/471,501	12/23/1999	FRANCIS BIOLLEY	612.37981X00	7486	
20457	7590 04/01/2003				
ANTONELLI TERRY STOUT AND KRAUS SUITE 1800 1300 NORTH SEVENTEENTH STREET			EXAM	EXAMINER	
			PECHHOLD, ALEXANDRA K		
ARLINGTON, VA 22209			ART UNIT	PAPER NUMBER	
		3671			
			DATE MAILED: 04/01/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

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25 ·		Application No.	

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	Application No.	Applicant(s)				
•	09/471,501	BOILLEY, FRANCIS				
Office Action Summary	Examiner	Art Unit				
	Alexandra K Pechhold	3671				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDON	imely filed  ays will be considered timely.  In the mailing date of this communication.  ED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 17 M	<u> March 2003</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)□ Thi	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4) Claim(s) is/are pending in the application	on.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>13-16</u> is/are allowed.						
6)⊠ Claim(s) <u>6,7,9,11,12 and 17-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers	·					
9)☐ The specification is objected to by the Examiner	r.					
10) The drawing(s) filed on is/are: a) accep	oted or b) objected to by the Ex	aminer.				
Applicant may not request that any objection to the	e drawing(s) be held in abeyance.	See 37 CFR 1.85(a).				
11)☐ The proposed drawing correction filed on	is: a)∏ approved b)∏ disappı	oved by the Examiner.				
If approved, corrected drawings are required in rep	ly to this Office action.					
12) The oath or declaration is objected to by the Ex	aminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)☐ Some * c)☐ None of:						
1. Certified copies of the priority documents	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language pro	visional application has been re	ceived.				
15) Acknowledgment is made of a claim for domesti	c priority under 35 U.S.C. §§ 12	0 and/or 121.				
Attachment(s)		(DTG (14) D				
1)	5) D Notice of Informa	ry (PTO-413) Paper No(s) I Patent Application (PTO-152)				

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### **DETAILED ACTION**

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 7, 9, 11, 12, 17, 19, and 20 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Remery (US 4,279,543).

Regarding claims 9, 17, and 20, Remery discloses a flexible riser part seen as flexible tube (6), connected to a point below the surface, and a rigid riser part seen as pipe (3) connected to the flexible riser part and to the floating support as shown in Fig. 1. Pipe (3) appears to have a length equal to half the water depth. Remery disclose a catenary anchor system, seen as weight (4) in Fig. 1 next to universal joint (5), or a connector, which can be viewed as weight (4) or universal joint (5) between the flexible riser part and the rigid riser part. Remery fails to disclose pipe (3) connected to a source of fluid to be injected and tube (6) connected to a point where the fluid is injected, instead disclosing that the device conveys a medium from a fixed position on the bottom below the water surface to an anchored buoy floating on the water (Col 1, lines 7-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the direction of medium flow in Remery to be from the buoy at the water surface to the fixed position on the bottom, since if it were desired to

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direct a medium to the bottom of the sea, it would be flow in this direction, and furthermore pipes are known to operate in both directions.

Regarding claim 11, Remery discloses the limitations of the claimed invention as discussed in claim 9 above. Remery fails to disclose the transfer of fluid between a floating support and a point below the water surface, instead disclosing that the device conveys a medium from a fixed position on the bottom below the water surface to an anchored buoy floating on the water (Col 1, lines 7-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the direction of medium flow in Remery to be from the buoy at the water surface to the fixed position on the bottom, since if it were desired to direct a medium to the bottom of the sea, it would be flow in this direction, and furthermore pipes are known to operate in both directions.

Regarding claim 12, the buoyant body (8) of Remery provides additional tension in the tube (6).

Regarding claims 7 and 19, a holding means in Remery can be viewed as joint (2) fastened to the buoy (1), since the pipe is fastened to the buoy with the joint and hangs downwardly from the buoy in the water (see abstract).

3. Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remery (US 4,279,543) as applied to claims 11 and 17 above, and further in view of Willis (EPO 0467635 A2). Remery discloses the limitations of the claimed invention except for heat insulation means placed on at least the rigid part and/or flexible part. Willis teaches thermally insulating compositions and a method of

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to insulating pipeline bundles and pipeline riser caissons. Willis states that it is necessary to insulate pipelines in order to prevent the temperature of the fluid traveling through the pipeline from significantly dropping, and that it is known to apply an inner or outer insulating layer to pipelines (page 2, lines 4-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the rigid or flexible part of Remery to have heat insulation means as taught by Willis, since Willis states on page 2, lines 4-23 that it is necessary to insulate pipelines in order to prevent the temperature of the fluid traveling through the pipeline from significantly dropping, and that it is known to apply an inner or outer insulating layer to pipelines.

## Allowable Subject Matter

4. Claims 13-16 are allowed.

#### Response to Arguments

5. Applicant's arguments filed 3/17/03 have been fully considered but they are not persuasive. Applicant states that Remery does not teach or suggest that the lower end of the pipe is anchored by a catenary anchor system, but does not address the fact that the Examiner viewed the weight (4) of Remery as an anchor system in claim 11.

Applicant now amended claim 9 to also recite a catenary anchor system, and likewise the Examiner uses the weight (4) of Remery to disclose this limitation.

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### Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (703) 305-0870. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703)308-3870. The fax phone number for this Group is (703) 305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.

Thomas B. Will Supervisory Patent Examiner Group 3600

AKP 3/30/03